

CLAIMS

1 1. A wireless transceiver device, comprising:
2 memory for storing synchronous and non-synchronous
3 data; and
4 circuitry defining logic for determining whether
5 transmission of non-synchronous data packets may be
6 initiated without conflicting with a packet of synchronous
7 data that is to be transmitted in the future.

1 2. The wireless transceiver of claim 1 wherein the
2 circuitry further defines logic that generates a bit string
3 whose logic states define whether, for a given time slot, a
4 synchronous event is to be transmitted.

1 3. The wireless transceiver of claim 1 wherein the
2 synchronous data comprises continuous bit rate data.

1 4. The wireless transceiver of claim 3 wherein the
2 continuous bit rate data comprises one of video or voice
3 data.

1 5. The wireless transceiver of claim 1 wherein the
2 circuitry further defines logic that evaluates a time value
3 with respect to a bit stream modulo to determine what bit in
4 the bit stream corresponds to the present time.

1 6. A method for determining whether to initiate non-
2 synchronous event transmission, comprising:

3 determining whether a synchronous event is scheduled
4 for transmission during the present defined time period; and
5 if not, determining whether to initiate the
6 transmission of a non-synchronous event.

1 7. The method of claim 6 wherein a synchronous event
2 comprises transmitting continuous bit rate data.

1 8. The method of claim 6 wherein a synchronous event
2 comprises transmitting voice data.

1 9. The method of claim 6 wherein a synchronous event
2 comprises transmitting video data.

1 10. The method of claim 6 wherein the step of
2 determining whether to transmit non-synchronous data
3 includes determining how many defined periods of time are
4 required for transmitting the non-synchronous data.

1 11. The method of claim 10 further including the step
2 of determining whether a collision between a synchronous and
3 non-synchronous transmission could occur.

1 12. The method of claim 11 wherein the step of
2 determining whether a collision could occur includes
3 determining whether there exists a sufficient number of
4 defined periods for which no synchronized events are
5 scheduled for transmission following the present period to
6 enable the initiation of transmitting the present non-
7 synchronous event without a likelihood of a collision.

1 13. The method of claim 6 wherein the step of
2 determining whether a synchronous event is schedule
3 comprises dividing the present time by a modulo number which
4 module number reflects the length of a bit stream in which
5 each bit of the bit stream represents a time period for
6 transmitting synchronized and unsynchronized events.

1 14. The method of claim 13 wherein a remainder is
2 determined during the dividing step is evaluated to
3 determine a group of bits of the bit stream that include a
4 bit that represents the present time period.

1 15. The method of claim 13 wherein a remainder is
2 determined during the dividing step is evaluated to
3 determine which bit of the stream of bits represents the
4 present time period.

1 16. The method of claim 15 further including the step
2 of determining the length (number of time periods) of a non-
3 synchronized event that is to be transmitted.

1 17. The method of claim 16 further including the step
2 of determining whether a synchronized event is scheduled for
3 transmission during the time period that would be utilized
4 for transmitting the non-synchronous event if the non
5 synchronous event were to be initiated in the present time
6 period.

1 18. A method for transmitting non-synchronous events,
2 comprising:
3 building a fixed length user bit stream that reflects
4 when synchronized events are to be transmitted;
5 copying the user bit stream into a real time bit
6 stream;
7 determining what bit of the real time bit stream
8 relates to the present time; and
9 determining whether to initiate transmission of a non-
10 synchronous communication event.

11 19. The method of claim 18 further including copying
12 the user bit stream into the real time bit stream on a
13 periodic basis.

1 20. The method of claim 18 further including
2 performing a mathematical operation as a part of determining
3 what bit of the real time bit stream relates to the present
4 time.

1 21. The method of claim 18 further including
2 performing a mathematical operation to determine a group of
3 bits of the real time bit stream that include what bit
4 relates to the present time.

1 22. The method of claim 18 including the step of
2 dividing the present time by a modulo number as a part of
3 determining what bit in the real time bit stream relates to
4 the present time.

1 23. The method of claim 22 wherein the modulo number
2 is equal to the number of bits in the user and the real time
3 bit streams.

1 24. The method of claim 22 wherein the modulo number
2 is equal to number "8".

1 25. The method of claim 22 wherein a remainder
2 determined during the dividing step identifies the specific
3 bit of the bit stream that represents the present time.